Zahoor Ahmed, owner of Rainbow Embroidery, mends a broken thread on one of the multihead sewing machines used to produce the beret flash.

More Than a Patch

Story by Beth Reece
Photos by Paul Disney

UNIT patches are like family photographs. "Shoulder-sleeve insignia, or SSI, give soldiers something to connect to, a symbol of the years they spend in their units. Just the sight of SSI inspires pride," said Pamela Reece, of the Technical and Production Division of The Institute of Heraldry (TIOH) at Fort Belvoir, Va.

SSI have graced soldiers' right shoulders since the 81st Infantry Division adopted the wildcat patch in 1917. The insignia grew so popular during World War I that heraldic programs were created to set design standards and policy for wear. Today, TIOH maintains specifications for more than 800 SSI.

Designer Edith Tumaneg creates patterns six times the patch's original size to specify the number and direction of stitches.

"When we create a new patch, our goal isn't to represent unit history or individual personalities. Instead, we offer a symbol that will have lasting value," Reece said.

Universal images with timeless appeal are used to illustrate units' branches. The patch of a signal unit, for example, would likely include a globe and a lightning flash.

Conception

Invention of new unit insignia begins with a request to the Heraldic Services and Support Division. Authorization is outlined in AR 670-1, "Wear and Appearance of Army Uniforms and Insignia," but generally, units with more than 500 soldiers are authorized their own SSI.

Illustrators in the Creative Heraldry Division sketch designs for the unit's approval. Though designs are fine-tuned on computers, Sarah Leclerc begins with doodles.

"Designs come from my own feelings and background, along with the guidelines for how a patch should be," Leclerc said. "Most of the time it's like pulling a rabbit out of a hat."

Digitizer James Bewighouse computerizes the patch's patterns so they can be read by the stitching machines.

Though units sometimes offer drafts of the patches they envision, TIOH prefers they don't. "Their suggestions tend to be a little simplistic and busy," said Stanley Haas, chief of TIOH's Technical and Production Division. "Just because you can draw something doesn't mean we can manufacture it," he tells customers.

Patches must be visually clean yet tell a whole story. "We have to think simple and boil it down to the very essence of what the unit does. It's a lot harder than using all the elements of a unit's makeup," Leclerc added.

Final designs define exact sizes and shapes, as well as background and foreground colors. Computers have simplified the process, but illustrators still rely on their artistic abilities to lend meaning and balance to patches.

Creation

From TIOH's computerized drawings, contractors such as Rainbow Embroidery in North Plainfield, N.J., turn visions into reality. They create a preparatory design known in the industry as a "cartoon" — a pattern six times the patch's actual size — which specifies the numbers and directions of stitches needed to create a multidimensional effect.

Cartoons are then computerized so patterns can be read by stitching machines, and swatches are made for TIOH's approval. "We look for quality, for clean stitching, whether the patch is too bulky, and whether the background shows through the stitching," said Rainbow's owner, Zahoor Ahmed.

Patches are limited to 99 standardized colors. Because quality is nonnegotiable, Reece said, the number of stitches used to embroider military patches is higher than most manufacturers ordinarily use.

"We use about five stitches to every one commercial stitch. Otherwise, our patches wouldn't wash well and would wear out so fast that soldiers would need about four patches while assigned to a unit instead of just one," she said.

Ahmed, who has worked with TIOH for almost 25 years, claimed that quality embroidery is a fading commodity in America, with the rise of overseas manufacturers who offer cheaper products in less time.

"This is a very serious, highly skilled art that requires creativity and technical know-how," he said.

To the Soldier

While cartoons are finalized, TIOH alerts the Soldiers Systems Directorate and the Army and Air Force Exchange Service that a new item is soon to be released. This speeds procurement because quota requirements can be researched and ready by the time TIOH provides a final technical data package to the Defense Supply Center-Philadelphia, which contracts out for mass production of military items.

Units can also seek local procurement of patches if the manufacturer has been certified through TIOH.

Haas said almost all military insignia are mass produced on Schiffli machines, which are so accurate some versions can stitch in 120 positions per inch. "The machines are amazing. It's not unusual to go into a manufacturer and see one that was built in 1902 but is still cranking away," he said.

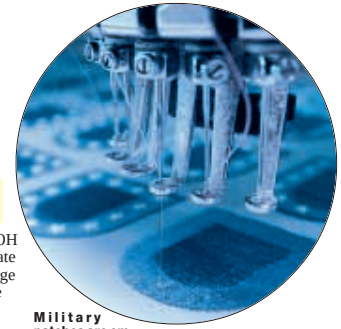
Creating a new SSI normally takes about three months from conception to production. This record was broken last year when the Army transitioned to black berets.

Under a very short Pentagon-mandated deadline, Rainbow Embroidery completed the beret's blue flash in three days. "I wanted to help give the Army the finest flash so soldiers could wear it with pride," Ahmed said, boasting a thank-you letter from SMA Jack L. Tilley.

Unit patches seem to possess an allure that needs little underscore from designers or manufacturers. Some soldiers keep them long after departing their units, and many veterans sew their patches onto jackets or baseball caps. World War I and II patches are regarded today as collectibles — some so rare they carry four-digit price tags.

"People who never served in the military are interested in our patches," Reece said. "Every time I see the 25th Infantry Division patch, I think of my Dad, who served with the 25th in Vietnam. They're more than just a uniform decoration — they remind us of people and memories." □

When the Army needed a flash for the black beret last year, Rainbow Embroidery's Zahoor Ahmed created computerized patterns of the blue, star-trimmed flash in just three days.



Military patches are embroidered one color and one layer at a time. Manufacturers use small, tight stitches to ensure the patch withstands time and repeated washings.